

REMARKS/ARGUMENTS

Claims 11-23 and new Claim 24 remain active in the case. Reconsideration is respectfully requested.

The present invention relates to a chewing gum formulation which contains a biodegradable polyester gum base.

Claim Amendments

Minor amendments have been to each of Claims 12-19, none of which significantly change the meaning of the claims. Claim 22 has been amended by limiting the scope of the polyester gum base to the (a), (b) and (c) and optionally (d) components. No other material than those mentioned in the claims are employed in the preparation of the polyester gum base. New Claim 24, which is a combination of the subject matter of Claims 11 and 20, contains similar limiting language. Entry of the amended claims is respectfully requested.

Claim Rejection, 35 USC 102

Claim 22 stands rejected based on 35 USC 102 as anticipated by Warzelhan et al, U.S. Patent 6,046,248. This ground of rejection is respectfully traversed. (The Examiner is requested to note that the Warzelhan et al patent is not cited on a PTO 892 form.)

Applicants point out that the cited Warzelhan et al patent does not disclose, as a product, the amorphous polyester of the present invention which is used as a gum base. True, the patent in column 3, for instance, describes the preparation of a polyether ester resin P1 by reacting a mixture of (b1) a mixture of an aliphatic diacid or diester and an aryl diacid or diester and (b2) a mixture of dihydroxy compounds (b21) which are alkanediols and cycloalkane diols and compounds (b22) a dihydroxy compound that contains ether functionality such as of the formula: $\text{HO}-[(\text{CH}_2)_n\text{-O}]_m\text{-H}$. However, the polyether ester that is

produced is not the final biodegradable polyester product of the reference, but rather as polyether ester P1 undergoes further reaction. As described at column 6, line 66 to column 7, line 42, the desired polyester product (T1), which is biodegradable, is obtained by reacting a polyether ester Q2 with a divinyl ether C1 and with a compound D. Compound D, as described at column 4, lines 50 *et seq*, is a molecule that contains from three to six reactive carboxyl and/or hydroxyl groups. The polyether ester Q2 molecule, which is biodegradable, is a high molecular weight molecule which is prepared by reacting a polyether ester P1 (c1), a hydroxycarboxylic acid compound (c2) and a multifunctional group containing compound D. It is therefore clear that the biodegradable polymers of the patent, having the multitude of uses described in columns 11 and 12 of the patent, are far from the claimed chewing gum base of the invention of limited scope that contains a comparatively simpler amorphous polyester prepared by reacting a mixture of diacids or diesters with at least one aliphatic diol which has at least one branching point, a saturated cyclic partial structure and/or at least one ether group.

Applicants also point out that the patent does not show or suggest a gum base that comprises resins, waxes and/or oils. Accordingly, the patent does not anticipate Claim 22 and withdrawal of the rejection is respectfully requested.

Claim Rejection, 35 USC 103

Claims 11-21 and 23 stand rejected based on 35 USC 103 as obvious over Warzelhan et al, U.S. Patent 6,046,248 in view of Grijpma et al, U.S. Patent 5,672,367. This ground of rejection is respectfully traversed.

The Grijpma et al patent is germane to the present invention insofar as it discloses a polyester resin material or polyester material that is useful as a chewing gum base. However, in the event the polyester material is selected, the patent only discloses polyesters that are

decidedly different from that of the present invention, since it is a product that is prepared by the ring opening polymerization of a cyclic ester such as a lactide, a glycolide, trimethylene carbonate, δ -valerolactone, β -propiolactone and ϵ -caprolactone. The resulting polyester is structurally unlike the polyester of the present claims which is formed by the reaction of a mixture of aliphatic diacids and aromatic diacids with at least one aliphatic diol. (Applicants point out that the EP reference discussed on page 1 of the present specification is the EP equivalent of the Grijpma et al, U.S. Patent 5,672,367 reference cited by the Examiner.)

The combination of the Warzelhan et al and Grijpma et al patents also does not lead the skilled artisan to the invention. As seen from the discussion above, the biodegradable polyether ester of the Warzelhan et al patent, while to some extent compositionally overlapping the polyesters from which the present gum base is formed, does not give the slightest hint that the polyesters described therein would be useful in the preparation of foodstuff, let alone chewing gums. The only disclosure in the patent having any relation ship to food is in column 5, lines 55 to 57 where it is stated that the copolymers described therein are useful for the packaging of foodstuffs, not that they are per se edible. The patent in column 1 discloses that the copolymer material of the patent is useful in the preparation of biodegradable thermoplastic molding compositions. Such compositions are far from being edible. It is clear therefore that the Examiner's use of the Warzelhan et al patent with Grijpma et al is made in view of applying the teachings of the present invention in hindsight, which is improper. Accordingly, withdrawal of the rejection is respectfully requested.

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It is believed that the application is in proper condition for allowance. Early notice to this effect is earnestly solicited.

Respectfully submitted,

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